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Steven Tischer

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EXAMINER

NEWAY, SAMUEL G

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/736,440	Applicant(s) TISCHER, STEVEN	
	Examiner SAMUEL G. NEWAY	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,9,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,9,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is responsive to the amendment after non-final filed on 09 April 2009.
2. Claims 1, 2, 6, 7, 9, 14, and 15 are still pending and considered below. All the independent claims have been amended.

Response to Amendment

3. The Claim Objections are withdrawn in view of Applicant's amendments.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 2, 6, 7, 9, 14, and 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 6, 7, 9, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al (US PGPub 2003/0061048) in view of Ostermann et al (USPN 6,976,082) and in further view of Walker et al (US PGPub 2001/0047260).

Claim 1:

Wu discloses a system for generating a collection of speech generation commands associated with computer readable information (Abstract), comprising:

a first computer (network server) configured to generate a first collection of speech generation commands (coded speech parameters) based on a first portion of computer readable information (text) (see [0019]);

the first computer in communication with a communication network and a phone operatively communicating with the communication network, wherein signals generated by the first computer are transmitted through the communication network to the phone (“transmitting the coded speech parameters from a network server to a wireless communication device”, [0019]).

Wu further discloses either the phone receiving the first collection of speech generation commands and accessing a predetermined set of the speech samples in the voice file based on the first collection of speech generation commands to generate auditory speech (“the native coded speech parameters, corresponding to each of the phonics from the previous step and along with suitable spaces, are subsequently processed in a signal processor 208 (such as a DSP for example) to provide a decompressed speech signal to an audio circuit 210 of the cellular phone handset”, [0018]) or the phone receiving signals corresponding to auditory speech and generating auditory speech from the received signals (“Alternatively, a network server of the communication system can convert this formatted text string to speech and transmit this speech to a conventional cellular handset over a voice channel instead of a data channel”, [0011]). In other words, Wu discloses, either receiving textual information in

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the form of coded speech parameters and performing a text-to-speech process at the phone or, performing the text-to-speech (TTS) process at a server and transmitting speech to the phone.

However, Wu does not explicitly disclose determining whether the phone includes a voice file (i.e. is able to perform text-to-speech which require voice files for concatenation based TTS) and conducting the text-to-speech, either at the phone if a voice file is present at the phone or, at the server if a voice file is not present on the phone.

In a similar network based text-to-speech system, Ostermann discloses checking if a phone (col. 6, lines 5-11) has speech synthesis software (which require voice files for concatenation based TTS) and performing the TTS at the phone if the phone has TTS capabilities or performing the TTS at a server and transmitting synthesized speech to the device from the server if the device does not have speech synthesis software (col. 11, lines 15-26).

It would have been obvious to one with ordinary skill in the art at the time of the invention to check Wu's phone for TTS capabilities (voice files in concatenation based TTS) and performing TTS on the phone, if the phone has voice files, or performing the TTS on a server and transmitting synthesized speech, if the phone does not have TTS capabilities, because a phone cannot perform TTS if it does not have TTS capabilities (voice files in concatenation based TTS).

Further, Wu and Ostermann do not explicitly disclose where the first computer receives a text to speech request signal from a phone through an email computer server via a communications network and generating speech command based on the request.

In a similar network based text-to-speech system, Walker discloses a computer receiving a text to speech request (Fig. 1, item 22a and related text) through an email computer server (Fig. 1, item 16, and related text. Note that this server receives and send electronic text messages, i.e. it's an email computer server) and generating speech from text in response to the request ("speech" output from item 20, Fig. 1 and related text).

It would have been obvious to one with ordinary skill in the art at the time of the invention to have received text to speech request in Wu's first computer and generated Wu's speech commands based on the request in order to allow a user to request only desired information in real time (see Walker [0003]).

Claim 2:

Wu, Ostermann, and Walker disclose the system of claim 1; Walker further discloses a second computer (item 22b, Fig. 2) configured to receive the second portion of computer readable information from a first computer and to generate a second collection of speech generation commands based on the second portion of computer readable information (Fig. 2, item 22 and related text), the first computer is further configured to receive the second collection of speech generation commands from the second computer and to generate a third collection of speech generation commands based on the first and second collection of speech generating commands (Fig. 2, item

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24 and related text, [0030]); wherein the first computer generates signals based on the third collection of speech generation commands ("Streaming buffer 24 transmits the speech segments in the proper order along with the telephony user address to voice application", [0031]).

It would have been obvious to one with ordinary skill in the art at the time of the invention to perform, in Wu's system, the text-to-speech process using a plurality of engines because the resulting system "efficiently processes text documents of any size" (Walker, [0018]) by dividing the text into easily manageable portions.

Claim 6:

Wu, Ostermann, and Walker disclose the system of claim 1, Wu further discloses wherein the first computer further includes a memory having a voice file stored therein, the voice file having a plurality of speech samples from a predetermined person, the first collection of speech generation commands being associated with a predetermined set of the plurality of speech samples (Fig. 2, element 202 and related text).

Claim 7:

Wu discloses a method for generating a collection of speech generation commands (Abstract), comprising:

generating a first collection of speech generation commands (coded speech parameters) based on a first portion of computer readable information (text message) in a first computer (Fig. 1, step 108 and related text);

wherein the first computer includes a memory having a voice file stored therein, the voice file having a plurality of speech generation commands associated with speech

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samples of a person (Fig. 2, element 202 and related text), wherein the generation of the first collection of speech generation commands includes:

generating phonetic units (phonics) associated with the first portion of computer readable information (text message) (Fig. 1, item 106 and related text);

comparing a phonetic unit to phonetic units stored in the voice file (code table, Fig. 2, element 202 and related text) to determine a matched phonetic unit; and selecting a speech generation command in the voice file associated with the matched phonetic unit (Fig. 1, step 108 and related text).

Wu does not explicitly disclose that the phonetic units associated with the text message and the phonetic units stored in the code table are composed of phonemes and multi-phonemes.

However, in the Background of The Invention, Wu discloses that phonemes (phones) and multi-phonemes (diphones) are used as phonetic units ([0004]).

It would have been obvious to one with ordinary skill in the art at the time of the invention to represent Wu's phonetic units using phonemes and multi-phonemes because they are well known standards in text-to-speech systems.

Wu further discloses either the phone receiving the first collection of speech generation commands and accessing a predetermined set of the speech samples in the voice file based on the first collection of speech generation commands to generate auditory speech ("the native coded speech parameters, corresponding to each of the phonics from the previous step and along with suitable spaces, are subsequently processed in a signal processor 208 (such as a DSP for example) to provide a

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decompressed speech signal to an audio circuit 210 of the cellular phone handset”, [0018]) or the phone receiving signals corresponding to auditory speech and generating auditory speech from the received signals (“Alternatively, a network server of the communication system can convert this formatted text string to speech and transmit this speech to a conventional cellular handset over a voice channel instead of a data channel”, [0011]). In other words, Wu discloses, either receiving textual information in the form of coded speech parameters and performing a text-to-speech process at the phone or, performing the text-to-speech (TTS) process at a server and transmitting speech to the phone.

However, Wu does not explicitly disclose determining whether the phone includes a voice file (i.e. is able to perform text-to-speech which require voice files for concatenation based TTS) and conducting the text-to-speech, either at the phone if a voice file is present at the phone or, at the server if a voice file is not present on the phone.

In a similar network based text-to-speech system, Ostermann discloses checking if a phone (col. 6, lines 5-11) has speech synthesis software (which require voice files for concatenation based TTS) and performing the TTS at the phone if the phone has TTS capabilities or performing the TTS at a server and transmitting synthesized speech to the device from the server if the device does not have speech synthesis software (col. 11, lines 15-26).

It would have been obvious to one with ordinary skill in the art at the time of the invention to check Wu’s phone for TTS capabilities (voice files in concatenation based

TTS) and performing TTS on the phone, if the phone has voice files, or performing the TTS on a server and transmitting synthesized speech, if the phone does not have TTS capabilities, because a phone cannot perform TTS if it does not have TTS capabilities (voice files in concatenation based TTS).

Further, Wu and Ostermann do not explicitly disclose where the first computer receives a text to speech request signal from a phone through an email computer server via a communications network and generating speech command based on the request.

In a similar network based text-to-speech system, Walker discloses a computer receiving a text to speech request (Fig. 1, item 22a and related text) through an email computer server (Fig. 1, item 16, and related text. Note that this server receives and send electronic text messages, i.e. it's an email computer server) and generating speech from text in response to the request ("speech" output from item 20, Fig. 1 and related text).

It would have been obvious to one with ordinary skill in the art at the time of the invention to have received text to speech request in Wu's first computer and generated Wu's speech commands based on the request in order to allow the user to request only desired information in real time (see Walker [0003]).

Claim 9:

Wu, Ostermann, and Walker disclose the method of claim 7, Wu further discloses wherein the comparing of a phoneme or multi-phoneme to phonemes and multi-phonemes stored in the voice file to determine a matched phoneme or multi-phoneme includes:

comparing a multi-phoneme to multi-phonemes stored in the voice file; and, comparing a phoneme to phonemes stored in the voice file (“mapping each of the phonics from the audio server, by a mapping unit 206, against the code table 202 to find the coded speech parameters corresponding to each of the phonics”, [0015]).

Claim 14:

Wu, Ostermann, and Walker disclose the method of claim 13, Wu further discloses wherein the phone includes a memory having a voice file (audio file) stored therein, the method further comprising accessing portions of the voice file based on the first collections of speech generation commands to generate auditory speech (“the native coded speech parameters, corresponding to each of the phonics from the previous step and along with suitable spaces, are subsequently processed in a signal processor 208 (such as a DSP for example) to provide a decompressed speech signal to an audio circuit 210 of the cellular phone handset”, [0018]).

Claim 15:

Wu, Ostermann, and Walker do not explicitly disclose a computer readable medium encoding software for performing the steps of method claim 7. It is old and well-known to encode program code for performing a method on a computer readable medium and implement instructions corresponding to the program code on a computer's processor. Claim 15 is directed to a storage medium encoded with machine-readable computer program code for performing the method of claim 7.

Implementing a method as software on a computer readable medium would be an obvious modification to one of ordinary skill in the art of speech synthesis, at the time

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of applicant's invention, so as to facilitate loading the software onto a computer to perform the steps listed above.

Accordingly, claim 15 is rejected with the same rationale as applied above with respect to method claim 7.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL G. NEWAY whose telephone number is (571)270-1058. The examiner can normally be reached on Monday - Friday 8:30AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

/S. G. N./
Examiner, Art Unit 2626